Roland SYNC BOX SBX-1

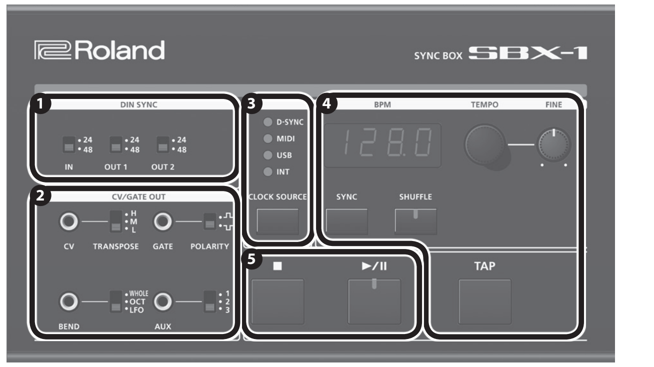
Owner's Manual

English

Before using this unit, carefully read the leaflet "USING THE UNIT SAFELY." The leaflet provides important information concerning the proper operation of the unit. Additionally, in order to feel assured that you have gained a good grasp of every feature of your new unit, read Owner's Manual in its entirety. This manual should be saved and kept on hand as a convenient reference.

Panel Descriptions

Top Panel



1 DIN SYNC

Switches the synchronization signal setting (SYNC 24, SYNC 48) of the DIN SYNC connectors (IN, OUT 1, OUT 2).

2 CV/GATE OUT

Connect an analog synthesizer to these jacks.

Jack/Controller	Explanation
CV jack	Controls the pitch. Outputs 0–+5 V. If the [TRANSPOSE] switch is set to L (Low), this outputs -1–+4 V. This jack supports OCT/V (it does not support Hz/V).
[TRANSPOSE] switch	Switches the pitch range of the MIDI notes that are input. Relative to M (Mid), you can specify ±2 octaves L (Low) or H (High).
GATE jack	Controls note-on/off. Outputs +5 V when using USB bus power, or +9 V when using the AC adaptor.
[POLARITY] switch	Switches the polarity of the voltage (⎍ ⇔ ⊔).
BEND jack	Outputs ±1 V.
[WHOLE/OCT/LFO] switch	Selects the setting of the BEND jack. WHOLE: Sets the variable range of the pitch bend to ±1 whole tone. OCT: Sets the variable range of the pitch bend to ±1 octave. LFO: Outputs an LFO in a maximum range of ±1 V.
AUX jack	Outputs the CV (control voltage: 0–+5 V) specified by the AUX (1–3) parameters. The AUX (1–3) parameters can be adjusted individually.
[1/2/3] switch	Choose the setting of the AUX jack from AUX 1–3.

3 CLOCK SOURCE

Here you can switch the clock source.

Controller	Explanation
CLOCK SOURCE indicator	Indicates the currently selected clock source (D-SYNC, MIDI, USB, INT (INTERNAL)). This blinks in synchronization with the clock interval (quarter note timing).
[CLOCK SOURCE] button	The master clock source is switched each time you press the button.

4 TEMPO/SYNC

Here you can change the tempo and make synchronization settings.

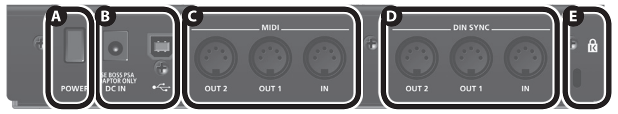
Controller	Explanation
Display	When the CLOCK SOURCE is INT (INTERNAL), this indicates the tempo. If something other than INT (INTERNAL) is selected, this shows "- - - -." When you're editing settings, this shows the parameter name or value.
[TEMPO] knob	Adjusts the tempo (20.0–300.0).
[FINE] knob	Use the [FINE] knob to adjust the tempo value below the decimal point.
[SYNC] button	Press the [SYNC] button if synchronization has been lost. Synchronized playback will stop while you hold down the button, and will resume on the next beat when you release it.
[SHUFFLE] button	Specifies shuffle. The indicator blinks while this is specified. To adjust the amount of shuffle, press the [SHUFFLE] button and then turn the [TEMPO] knob (-50–0–50). The setting is finalized when you press the [SHUFFLE] button once again. The indicator is lit if the value is other than 0. * Shuffle will not be on if the value is 0.
[TAP] button	If the CLOCK SOURCE is INT (INTERNAL), you can specify the tempo by pressing the [TAP] button at the desired interval (tap tempo).

5 PLAY/STOP

Starts/stops synchronized playback (when CLOCK SOURCE is INT (INTERNAL)).

Controller	Explanation
[■] button	Stops synchronized playback.
[►/II] button	When you press the [►/II] button, the indicator lights and synchronized playback begins. When you press the [►/II] button again, the indicator blinks and synchronized playback stops. When you press the [►/II] button once again, the indicator lights and synchronized playback resumes from the location at which it stopped.

Rear Panel



A Turning the power on ([POWER] switch)

Controller	Explanation
[POWER] switch	This turns the power on/off.

* After you have made the correct connections, be sure to turn on the master device first, and then the slave devices (or amp).
  If you turn on the power in the incorrect order, you risk malfunctions or damage to your equipment. When turning the power off, first turn off the slave devices (or amp) and then turn off the master device.
* This unit is equipped with a protection circuit. A brief interval (a few seconds) after turning the unit on is required before it will operate normally.
* **With the factory settings, the unit's power will automatically be switched off 240 minutes after you stop playing or operating the unit.**
  If you don't want the power to turn off automatically, change the "A-oF (Auto Off)" setting to "oFF (Off)" as described on "Editing the Parameters"

NOTE

- Any settings that you are in the process of editing will be lost when the power is turned off. If you have any settings that you want to keep, you should save them beforehand.
- To restore power, turn the power on again.

B

Jack	Explanation
DC IN jack	Connect the included AC adaptor here. Use only the included AC adaptor.
USB (•⭠)port	Use a commercially available USB cable to connect this port to your computer. This lets you transfer USB MIDI data. It is normally unnecessary to install a driver. If you are connecting multiple units to your computer, you will need to set the USB Driver Mode (USb.d) to Advance (Adu) and install the USB driver. Download the USB driver from the Roland website. For details, refer to Readme.htm which is included in the download. ➡ **http://www.roland.com/support/** When connected via USB, signals from the DIN SYNC IN connector and the MIDI IN connector are sent to the computer. ➡ "Signal Flow When a Computer Is Connected".

C MIDI connectors

Connect MIDI devices to these connectors.

Connector	Explanation
MIDI IN connector	Sends signals to the DIN SYNC OUT 1/2 jacks, CV/GATE jacks, BEND jack, AUX jack, and MIDI OUT 1/2 connectors. When connected via USB, performance data from the MIDI IN connector is output via USB.
MIDI OUT 1 connector	CLOCK and START/STOP follow the CLOCK SOURCE setting of the SBX-1. Transmits the performance data received via USB and the MIDI IN connector.
MIDI OUT 2 connector	CLOCK and START/STOP follow the CLOCK SOURCE setting of the SBX-1. Only the CLOCK and START/STOP are transmitted from USB. Performance data from the MIDI IN connector is always transmitted.

D DIN SYNC jacks

Connect a device that supports DIN SYNC to these jacks.

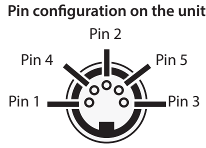
Jack	Explanation
DIN SYNC IN jack	This jack receives Start, Stop, Clock, and Continue Start according to the setting of the DIN SYNC switch.
DIN SYNC OUT 1 jack	These jacks transmit Start, Stop, Clock, and Continue Start according to the setting of the DIN SYNC switch.
DIN SYNC OUT 2 jack	

About the signals of the DIN SYNC jacks

* **These will not work unless you use MIDI cables that support DIN SYNC.**

Pin	Explanation
Pin 1	**Start/Stop**
Pin 2	**GND**
Pin 3	**Clock**
Pin 4	**none**
Pin 5 (*)	**Continue Start**

Pin configuration on the unit



* The operation of Continue Start will differ depending on the device that is connected. Refer to the owner's manual of the device that is connected.

E Security slot (🔒)

➡ **http://www.kensington.com/**

Various Settings

Editing the Parameters

Here's how to make settings for the SBX-1.

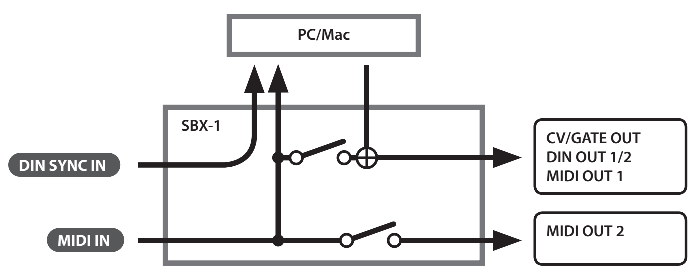
1. **Hold down the [■] button and press the [CLOCK SOURCE] button.**
   The D-SYNC indicator and the MIDI indicator light, and the display indicates the parameter name.
2. **Use the [TEMPO] knob to select a parameter.**
3. **Press the [CLOCK SOURCE] button; the value of the selected parameter is shown.**
4. **Use the [TEMPO] knob to edit the value.**
5. **Press the [CLOCK SOURCE] button to return to the parameter selection state.**
6. **Press the [■] button to return to normal operation.**

* **If you want to save the settings, long-press the [CLOCK SOURCE] button until the display indicates "SAuE."**
  The settings are also saved when you use the [POWER] switch to turn off the power.
  The settings are not saved if you turn off the power by disconnecting the AC adaptor or the USB cable.

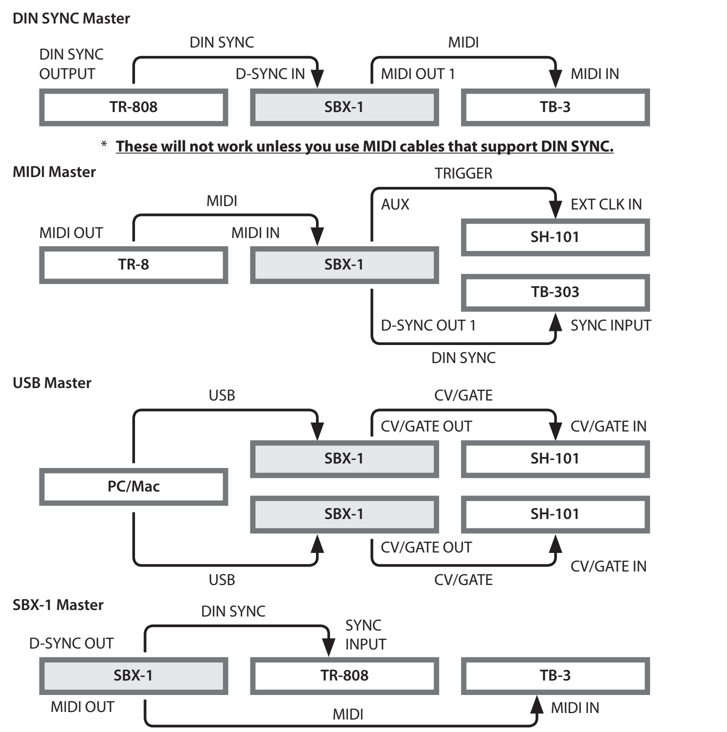
Parameter		Value	Explanation
CH .C	**MIDI Ch: CV/GATE**	oFF, 1–16, oMn1 (omni)	Specifies the MIDI channel that will control the output signals of the CV/GATE jacks.
CH .A	**MIDI Ch: AUX (1–3) *1**		Specifies the MIDI channel that will control the output signal of the AUX jack (1–3).
CH .b	**MIDI Ch: Bend**		Specifies the MIDI channel that will control the output signal of the BEND jack.
oUt.C	**Output Mode: CV/GATE**	CuGt, trG	Selects the function of the CV jack and GATE jack. CuGt: The jacks operate as CV/GATE jacks. trG: The jacks output a trigger when a specific note is received.
oUt.A	**Output Mode: AUX (1–3) *1**	Specifies the message that is output from the AUX jack (1–3). trG (Trigger), uEL (Velocity), AFt (After Touch), LFo (LFO), CC.1–CC.31, CC.64–CC.95 (CC#1–31, 64–95)	
bnd.r	**Bend Range for CV**	oFF, 1–24	Specifies the pitch bend range that is mixed into the output signal from the CV jack. * When oUt.C is set to CuGt
bnd.S	**Bend Mode for CV**	oFF, FASt (FAST), MId (MID), SLoW (SLOW)	Specifies the speed at which to interpolate between the received pitch bend messages. * When oUt.C is set to CuGt
Prt.S	**Portamento SW for CV**	Specifies the portamento on/off setting for the CV jack. oFF: OFF on: Portamento is always on. LEGt: Portamento is applied when you play legato. * When oUt.C is set to CuGt	
Prt.t	**Portamento Time for CV**	0–127	Specifies the portamento time for the CV jack. * When oUt.C is set to CuGt
trnS	**Transpose**	-12–12	Specifies the reference note when the [TRANSPOSE] switch is set to "M" (Mid).
trG.C	**Trigger Note: CV**	bd (36), Sd (38), Lt (43), Mt (47), Ht (50), rS (37), HC (39), CH (42), oH (46), CC (49), rC (51) * The value in parentheses indicates the note number. 32n, 32nF (Thirty-second note), 16t, 16tF (Sixteenth-note triplet), 16n, 16nF (Sixteenth note), 8t, 8tF (Eighth-note triplet), 8n, 8nF (Eighth note), 4t, 4tF (Quarter-note triplet), d8n, d8nF (Dotted eighth note), 4n, 4nF (Quarter note) * When oUt.C or oUt.A is set to trG * Valid notes are created from the clock specified by CLOCK SOURCE. * If the indication has no "F" following the note, the trigger is output only between START and STOP. * If the indication has an "F" following the note, the trigger is output at all times.	
trG.G	**Trigger Note: GATE**		
trG.A	**Trigger Note: AUX (1–3) *1**		
LFo.C	**LFO Waveform: CV**	Specifies the LFO waveform. tr1 (TRI), SAW (SAW), Sq5–Sq1 (SQUARE 50%–10%), SMPL (Sample and Hold), SMP2 (CV only) * When oUt.C or oUt.A is set to LFo	
LFo.A	**LFO Waveform: AUX (1–3) *1**		
LFo.b	**LFO Waveform: Bend**	Specifies the LFO waveform. tr1 (TRI), SAW (SAW), Sq5–Sq1 (SQUARE 50%–10%), SMPL (Sample and Hold) * When the [BEND] switch is set to LFO	
L-C.C	**LFO Control: CV**	Select the parameter that is output from each jack. oFF (OFF), bnd (Bend), uEL (Velocity), AFt (After Touch), CC.1–CC.31, CC.64–CC.95 (CC#1–31, 64–95) * If this is OFF, LFO is always output.	
L-C.A	**LFO Control: AUX (1–3) *1**		
L-C.b	**LFO Control: Bend**		
L-d.C	**LFO Depth: CV**	-100–0–100	Specify the LFO Depth that is output from each jack.
L-d.A	**LFO Depth: AUX (1–3) *1**		
L-d.b	**LFO Depth: Bend**		
L-r.C	**LFO Rate: CV**	Specify the LFO Rate (speed) that is output from each jack. 0–100 (0–100), 16t (Sixteenth-note triplet), 16n (Sixteenth note), 8t (Eighth-note triplet), 8n (Eighth note), 4t (Quarter-note triplet), 4n (Quarter note), 4n-2 (Quarter note x 2), 4n-4 (Quarter note x 4), 4n-8 (Quarter note x 8)	
L-r.A	**LFO Rate: AUX (1-3) *1**		
L-r.b	**LFO Rate: Bend**		
L-t.C	**LFO Key Trigger : CV**	Specifies whether the LFO is reset to the beginning of the waveform when a note-on is received. oFF : Not reset on : Reset	
L-t.A	**LFO Key Trigger : AUX (1–3) *1**		
L-t.b	**LFO Key Trigger : Bend**		
SHFL	**Shuffle Mode**	16 (shuffle 16th note locations), 8 (shuffle 8th note locations)	
bPM¯	**Max Int Tempo**	20–300	Specifies the maximum/minimum tempo value that can be set when CLOCK SOURCE is INT. * Min cannot be set above Max.
bPM_	**Min Int Tempo**		
F1n.C	**Fine Tune for CV**	-25–0–25	Adjusts the 0 V of the CV OUT. * This value will fluctuate slightly if the SCAL value is changed.
SCAL	**Scale**	0–255	Adjusts the 5 V of the CV OUT or the AUX OUT. * This value will fluctuate slightly if the F1n.C value is changed.
d1SP	**Tempo Display Mode**	Selects the CLOCK SOURCE whose tempo is shown in the display. Int (INT), ALL (D-SYNC, MIDI, USB, INT) * The tempo indication is not stable for the CLOCK SOURCE other than Int.	
d1AL	**Tempo Dial Mode**	Specifies the operation of the [TEMPO] knob and [FINE] knob. * Use the [TEMPO] knob to edit the left side of the indication, and use the [FINE] knob to edit the right side. b-F: BPM & FINE F-b: FINE & BPM b-P: BPM & PERCENT	
MId.1	**MIDI Routing : MIDI OUT 1**	Specifies whether data sent from MIDI IN to MIDI OUT1, CV/GATE, BEND, and AUX jacks is output. oFF: Not output. on: Output. AUto: Output if USB is unconnected; not output if USB is connected.	
MId.2	**MIDI Routing : MIDI OUT 2**	Specifies whether data sent from MIDI IN to the MIDI OUT2 connector is output. oFF: Not output. on: Output.	
MId.d	**MIDI Device ID**	1–16	Specifies the device ID for system exclusive messages.
USb.d	**USB Driver Mode**	Selects the USB driver. GEn (Generic), Adu (Advance) * The setting takes effect the next time a USB connection is made.	
A-oF	**Auto Off**	Specifies the auto-off setting. oFF (OFF), 240 (240 min.)	

*1 To edit each of the AUX jack settings (1–3), set the [1/2/3] switch appropriately before editing the value.

Signal Flow When a Computer Is Connected



Connection Example



* To prevent malfunction and equipment failure, always turn down the volume, and turn off all the units before making any connections.

Restoring the Factory Settings (Factory Reset)

Here's how to return the SBX-1 to its factory-set state.

1. **While holding down the [SHUFFLE] button, turn on the power.**
   The display indicates "rSt" and the [►/II] button blinks.
   If you decide to cancel the factory reset, turn off the power.
2. **Press the [►/II] button to execute the factory reset.**
3. **When the display indicates "C0MP," turn the power of the SBX-1 off and then on again.**

Main Specifications Roland SBX-1: SYNC BOX

Power Supply	AC adaptor, or obtained via USB port (USB bus power)	
Current Draw	150 mA (When using an AC adaptor) 200 mA (When using USB bus power)	
Dimensions	220 (W) x 135 (D) x 52 (H) mm	8-11/16 x 5-3/8 x 2-1/16 inches
Weight	790 g	1 lb 12 oz
Accessories	Owner's Manual, AC adaptor, Leaflet "USING THE UNIT SAFELY"	
Options (sold separately)	USB cable	

* In the interest of product improvement, the specifications and/or appearance of this unit are subject to change without prior notice.